NATIONAL PARK SERVICE
ENVIROFACTS
11/6/98

National Park Service
Hazardous Waste Management &
Pollution Prevention Team
Washington DC 20240
(202)565-1240(x3)

ASBESTOS MANAGEMENT

DEFINITIONS

Asbestos: Asbestos is a mineral-based material that is heat and chemical resistant. Because of this, it has been used in the manufacture of friction products, textiles, thermal insulation and other types of building materials including pipe and duct insulation, floor tiles, ceiling tiles, wall board (transite), and roof and floor mastics. There are various types of asbestos: chrysotile, amosite, crocidolite, tremolite, anthophyllite, and actinolite.
Asbestos Containing Material (ACM): Any material containing more than 1% asbestos fibers by weight.
Presumed ACM: Thermal insulating/ surfacing material found in buildings constructed prior to 1980.

APPLICABLE STANDARDS

Federal: Environmental Protection Agency (EPA) regulations 40 CFR 61 - National Emission Standard for Hazardous Air Pollutants (NESHAP), and 40 CFR 763 Subparts F & G. Public Law 99-519 - Asbestos Hazard Emergency Response Act (AHERA). Occupational Safety and Health Administration (OSHA) regulations 29 CFR 1910.1001 and 29 CFR 1926.1101.

State: Most states have adopted regulations governing procedures for abating asbestos and managing asbestos materials. Typically, they are similar to the Federal regulations; however, state regulations can be more stringent than federal and should be reviewed.

Other: Local regulations for asbestos management may exist, particularly in larger metropolitan areas.

HANDLING

Waste ACM (friable & non-friable) must be placed in air-tight and leak-proof containers to ensure no visible emissions occur during handling. Typically, this material is placed into 6-mil thick plastic bags. Sharp objects (e.g., plaster lath) should be placed in puncture-proof containers such as fiber drums. Waste ACM, which is removed wet, must remain wet after placement into the containers. After the waste is securely enclosed inside the bags, the best recommended practice is to decontaminate the bags by wet wiping or HEPA vacuuming them clean. Double bagging of waste ACM is recommended to ensure safer handling.

STORAGE

Each waste ACM container must be labeled with the name of the waste generator and the location of the waste generation. Waste ACM containers should be stored in a secured area.

DISPOSAL

Waste ACM is considered a non-hazardous waste or "special" waste in most states. The state agency responsible for solid waste management should be contacted to determine specific waste ACM disposal permitting procedures. Waste ACM generators should take measures to ensure that no visible emissions occur during waste ACM disposal. Also, waste ACM should be covered with non-ACM material within 24 hours of placement at the landfill.

It is recommended that vehicles used to transport waste ACM have an enclosed carrying compartment or a canvas cover to prevent damage to the material and prevent fiber release. The vehicle should be properly placarded with the Department of Transportation (DOT) shipping number 2212. Drivers must be properly certified to transport ACM in accordance with 49 CFR 173. Asbestos shipments must be properly documented with a manifest that provides the specific information outlined in the regulations. This manifest must be provided to the disposal site owner or operator. Regulatory authorities must be contacted if receipt of disposal confirmation from the landfill is not received within 45 days of waste shipment.

SPECIAL TOPICS

Identification

The primary risk associated with asbestos is the potential for inhalation of asbestos fibers. ACM is subdivided into two major categories to aid in assessing its potential hazard, as follows:

- Friable ACM - when dry, may be crumbled, pulverized, or reduced to powder by hand pressure.
- Non-friable ACM - when dry, may not be crumbled, pulverized, or reduced to powder by hand pressure.

Certain materials are generally considered more likely than others to contain asbestos. OSHA regulations have identified the following as materials presumed to be ACM unless demonstrated otherwise:

- Thermal system insulation and sprayed-on surfacing materials in buildings constructed prior to 1980, and
- Asphalt and vinyl floor tile material installed prior to 1980.

While these materials are presumed to be ACM for OSHA occupational exposure issues, all of the building materials noted in the previous section should be considered suspect ACM. These types of materials should be evaluated for their asbestos content prior to disturbing or disposing of them. This evaluation should be performed by an Asbestos Hazard Emergency Response Act (AHERA)-certified individual. Typically, this includes the collection of samples for laboratory microscopic analysis.

Abatement

Selection of abatement procedure(s) at a building inspected and found to contain ACM, will depend on asbestos type(s) identified. The final selection must be based on federal and state regulations and must address such requirements as notification, permits, certifications, and licenses. During the abatement process, clean air must be maintained by an air sampling professional.

Personal Protective Equipment

When ACM is disturbed, asbestos fibers will become airborne. In this state, the asbestos particles may be inhaled and this may pose a significant health risk. To prevent such risks, all personnel involved in the abatement activities must wear respirators and other protective equipment in compliance with OSHA regulations.

Liability

As with any hazardous material, waste ACM should be managed to prevent potential CERCLA liabilities. This includes adhering to the following:

- Characterize ACM prior to disposal to prevent improper waste disposal
- Do not store or dispose of ACM on site
- Ensure that properly permitted facilities are used for off-site ACM disposal

POLLUTION PREVENTION

Parks should specify in all new building and construction contracts that no ACM is to be used or installed and that ACM is disposed of properly.

ENVIROFACTS X-REFERENCES

- Environmental Training
- Hazard Communication

ASBESTOS MANAGEMENT CHECKLIST

Checklist Item	Notes
1. Confirm whether the park has building materials that may contain asbestos.	
2. If yes to Item 1, check whether disposal of any of these materials is planned.	
3. If yes to Item 2 and the park has manufacturing specifications on materials to be disposed, verify that a determination has been made on whether the material is ACM or non-ACM.	
4. If no to Item 3, make sure that a properly certified individual has been retained to evaluate the material. Check with your state agency to determine specific certification needs.	
5. Assure that during waste ACM generation: • Material is properly containerized to prevent visible emissions. • Containers are properly labeled with generator name and location and in good condition. • Containers are properly stored.	
6. Assure that during waste ACM transport: • The vehicle is properly configured to prevent container damage and fiber release. • The manifest is provided to transporter. • The vehicle is properly placarded.	
7. Verify that when disposing waste ACM: • A proper disposal permit is obtained. • A permitted facility is used for disposal.	
8. Suitable locations for in-place abatement have been identified.	